BRUHAT BANGALORE MAHANAGARA PALIKE

Sl No	Name of work : Improvements of roads, srains and other developmental works in ward no 03 under development head in chief minister Nava Nagarothan grants of Yelahanka Division (PACKAGE NO-03)

MODIFIED SCHEDULE - B

Item No	Description of Work	Unit	Total Quantity as per modified Estimate	Rate as per estimate in Rs.	
				In Figures	In Words
1	Removing and refixing of footpath slab	Sqm	17038.60	219.26	Rupees Two hundred Ninteen and Paise Twenty Six Only
2	Removing and resetting of kerb stones	M	13612.00	110.19	Rupees One Hundred Ten and Paise Nineteen Only
3	Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications and directions of the Engineer in charge	Cum	9587.23	222.38	Rupees Two Hundred twenty two and Paise Thirty Eight Only
4	Providing and laying Plain cement concrete of mix1:3:6 with OPC cement @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days Including cost of materials,labour, HOM curing form work, Scaffolding and Centering complete as per specifications and directions of the Engineer in charge.	Cum	595.86	5780.92	Rupees Five Thousand Seven Hundred Eighty and Paise Ninety Two Only
5	Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications and directions of the Engineer in charge.	T	72.91	75943.33	Rupees Seventy Five Thousand Nine Hundred Forty Three and Paise Thirty Three Only
6	Providing laying plain/ reinforced cement concrete for side Drains Using M20 nominal mix Concrete with OPC at 300kgs.With 20mm and Down size granite metal coarse aggregate at 0.69cum and fine aggregate at 0.43cum Machne mixed, well compacted for wall and Bottom including centering shuttering,cost of materials,HOM of Machincry,Curing Etc ,Complete Excluding cost of Steel as per morth MORTH specification No. 1500, 1700, 2200. Including Cost of material, Labour, HOM complete as per specifications and directions of the Engineer in charge.	Cum	1161.17	7423.71	Rupees Seven Thousand Four Hundred Twenty Three and Paise Seventy one Only
7	Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications and directions of the Engineer in charge	Cum	126.60	5879.98	Rupees Five Thousand Eight Hundred Seventy Nine and Paise Ninety Eight Only

For M/s. [illegible]

Partner

Item No	Description of Work	Unit	Total Quantity as per modified Estimate	Rate as per estimate in Rs.	
				In Figures	In Words
8	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc , complete as per specifications and directions of the Engineer in charge. (Data Rate)	Sqm	4621.70	2453.85	Rupees Two Thousand Four Hundred Fifty Three and paise Eighty Five Only
9	Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc , complete as per specifications and directions of the Engineer in charge.	Sqm	122.40	5688.90	Rupees Five Thousand Six Hundred Eighty Eight paise Ninty Only
10	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation etc , complete as per specifications and directions of the Engineer in charge.	Nos	9502.00	500.85	Rupees Five hundred and paise Eighty Five Only
11	KSRB 5-14 1: Providing and constructing load bearing wall with solid concrete blocks of size 400x200x200mm having block density not less than 1800kg/m3 having a minimum average compressive strength of 99 n/mm2 CGD fiFFDi Dg * ?"1 65 (Part 4 j:2u65 and constructed with CM 1:4, as per IS 2572:2005 including cost of all materials labour charges, scaffolding, curing, hire charges of machineries	Sqm	0.00	1034.21	Rupees One Thousand Thirty Four and paise Twenty One only
12	KSRB15-3 7 Providing 18mm thick cement plaster in singlecoat with cement mortar 1.3, to brick masonry including rounding off corners wherever required smooth rendering.: Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications	Sqm	0 00	312 98	Rupees Three Hundred Twelve and paise Ninety Eight only
13	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications and directions of the Engineer in charge.	Sqm	1770.00	89.04	Rupees Eighty Nine and paise Four only
14	Providing and laying heavy duty cobble stones interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM comp'ete as per sp°cifkatio s and as pe› directoins cf the Engineer in charge of work.	Sqm	0.00	1171 99	Rupees One Thousand One Hundred Seventy One and paise Ninety Nine only
15	Providing ruled pointing to coursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining including cost of materials, labor, HOM curing complete as per specifications	Sqm	0 00	158 05	Rupees One Hundred Fifty Eight and paise Five only

For M/s. RAM & COMPANY

Partner

Item No	Description of Work	Unit	Total Quantity as per modified Estimate	Rate as per estimate in Rs.	
				In Figures	In Words
16	Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications and directions of the Engineer in charge.	Cum	898.28	59.88	Rupees Fifty Nine and paise Eighty Eight only
17	Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications and as per directoins of the Engineer in charge of work.	Sqm	2566.50	6.68	Rupees six and paise sixty eight only
18	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications and directions of the Engineer in charge.	Cum	384.98	1947.75	Rupees One Thousand Nine Hundred Forty Seven and paise Seventy Five only
19	Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications and directions of the Engineer in charge.	Cum	513.30	2101.34	Rupees Two Thousand One Hundred One and paise Thirty Four only
20	Providing and applying primer coat with S S bitumen. e u'sior. on p.epored surface of granular base such as WMM including cleaning of road surface and spray.ng primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications and as per directoins of the Engineer in charge	Cum	2579.00	35.62	Rupees Thirty Five and paise Sixty Two only
21	Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications and directions of the Engineer in charge.	Sqm	79728.07	5.57	Rupees Five and paise Fifty Seven only
22	Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications and directions of the Engineer in charge.	Sqm	81005.88	13.36	Rupees Thirteen and paise Thirty Six only
23	KSRRB M500-17. Providing and laying dense graded bituminous macadam do-using 120 TPH capacity Asphalt batch m"ix plant with sensor paver Gr-11 Cum (50 mm to 75 mm) with 4.5 % VG-30 Bitumen crushed aggfegates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and ialignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 505 of MORTH V revision.	Cum	1088.99	8001.36	Rupees Eighty Thousand One and paise Thirty Six only

FOR M/S. RAM & COMPANY

Partner

Item No	Description of Work	Unit	Total Quantity as per modified Estimate	Rate as per estimate in Rs.	
				In Figures	In Words
24	Providing and laying Bituminous Concrete 40 mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment , rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications and directions of the Engineer in charge.	Cum	3240.24	9134.39	Rupees Nine Thousand One Hundred Thirty Four paise Thirty Nine only
25	Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications and directions of the Engineer in charge.	Sqm	4070.19	477.48	Rupees Four Hundred Seventy Seven and paise Forty Eight only
26	KSRRB M800-35. Supply and Installtion ot Moulded Shank Raised Pavement Markers made of polycarbonate and ABS(Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro› prismatic lens capable of providing total internal reflection of the «9ht entering the lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No› RW/ NH/33023/10-97 - DO III Dt 11.06.1997. The height, width and length shall not exceed 50 mm, 10Ct mm and 102 mm and wtth minimum reflective area of 13 Sqcm on each side and the slope to the basE! shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not les. than 19 mm and height not less than 30 mm) from the body is to be a minimum value of 500 Kg. Fixings will be by dFilli 9 holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturers recommendation and complete as directed by the engineer.	Nos	3720.10	375.08	Rupees Three Hundred Seventy Five and paise Eight only
27	Dismantling the damaged or collapsed manholes of 1.2 m dia, Co Nickel in shapoe and reconstructing the same for the same dimensions with machine made wire cut brick in CM 1:4 with ordinary portland cement etc, as per design and specifications. The existing ring, cober and CC bedding to be used for manholes of 1.2M dia	Nos	0.00	3998.61	Rupees Three Thousand Nine Hundred Ninety Eight and paise Sixty One only

For M/s. RAM & COMPANY

Partner

Item No	Description of Work	Unit	Total Quantity as per modified Estimate	Rate as per estimate in Rs.	
				In Figures	In Words
28	Supply and fixing of Retro Reflective Single Arrow Road Name Signboard of size 1600mm x 900mm made out of retro reflective sheeting conforming to Type XI standards of ASTM D 4956 - 09 & as per IRC 67-2012 for full back ground of blue colour & white letters and fixed over 4 mm thick Aluminium Composite Material sheet having minimum 0.5 mm thick Aluminium skin on both sides with back side painted grey colour and fixed over back support frame SS angle of 15mm x 20mm x 1.2mm, supported by 38mm OD stainless steel pipe alt round in 304 grade and 2 nos of vertical posts of 50 mm OD stainless steel pipe of 202 grade firmly fixed to the ground by means of properly designed foundation of size 450mm x 450mm x 600mm in 1:1.5:3 ratio cement concrete. The background shall be blue in color with letters and border in white, the item includes earthwork excavation, cost of all materials, loading, unloading, lead, lift, transportation etc., complete, as per direction of engineer incharge of work clause a.9 of IRC 67-2012 for Type XI retro re5ective sheeting from the sheeting manufacturer & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 including outdoor weather exposure report for the retro reflective sheeting offered shall be submitted by the contractor for technical qualification in the tender	Sqm	12.96	14799.86	Rupees Fourteen Thousand Seven Hundred Ninety Nine and paise Fifty Six only
29	Direction and Place Identification Signs with size marethan 0.9 Size Board: Providing and erecting direction and place identification retro -reflectorised sign as per IRC:67 made of high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 2 mm thick with area not exceedin9 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm , 2 Nos. firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing.	Nos	24.30	7935.69	Rupees Seven Thousand Nine Hundred Thirty Five and paise Sixty Nine only

For M/s. RAM & COMPANY

Partner

Executive Engineer,
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